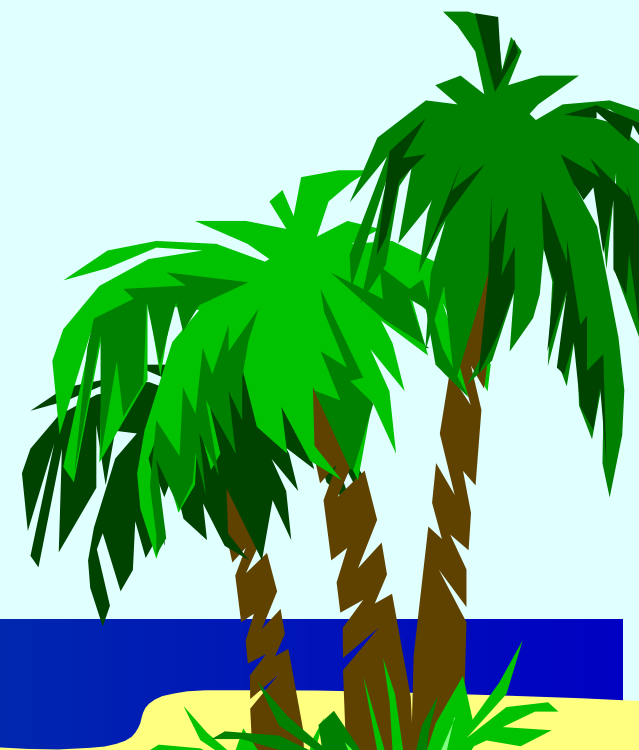


HURRICANE AWARENESS



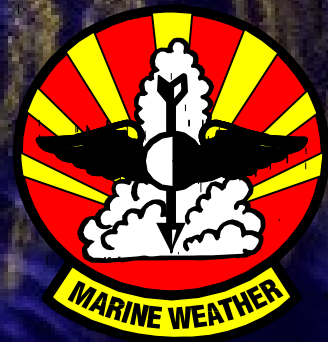
**2005
MCAS CHERRY POINT
WEATHER
466-2523**



A satellite image of Hurricane Floyd, showing a well-defined eye and spiral cloud bands. The image is a false-color representation, with the eye appearing as a bright yellow-white circle. The surrounding cloud bands are depicted in shades of blue and white, with some areas showing a greenish-yellow hue. The overall structure is circular and symmetrical, typical of a mature hurricane.

MCAS Cherry Point

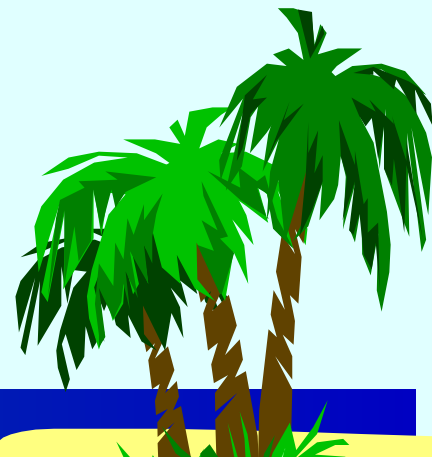
Hurricane Floyd
NOAA-14 AVHRR HRPT
Multi-spectral False Color Image
September 15, 1999 @ 2018 UTC





HURRICANE SEASON

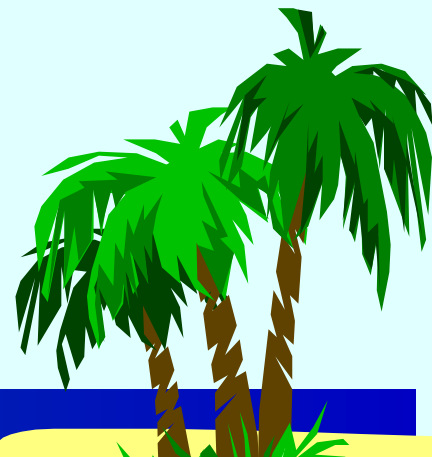
- ATLANTIC
- 01 JUNE - 30 NOVEMBER
- PEAK MONTHS ARE AUGUST AND SEPTEMBER
- CAN OCCUR ANY MONTH

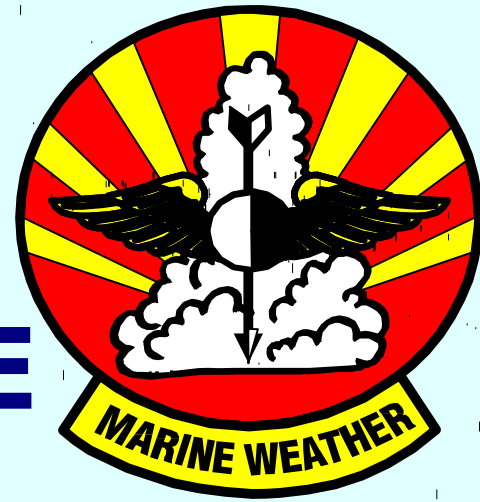


TROPICAL CYCLONE CLASSIFICATIONS



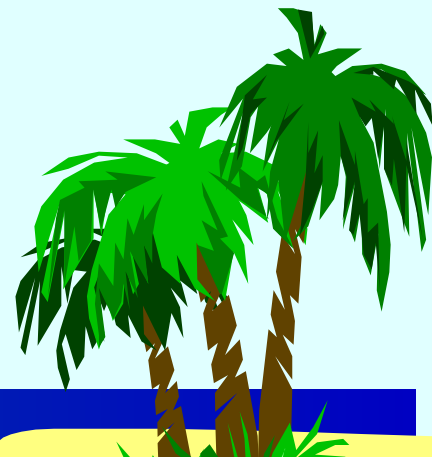
- **TROPICAL DISTURBANCE**
- **TROPICAL DEPRESSION**
- **TROPICAL STORM**
- **HURRICANE / TYPHOON**
- **SUPER HURRICANE**





TROPICAL DISTURBANCE

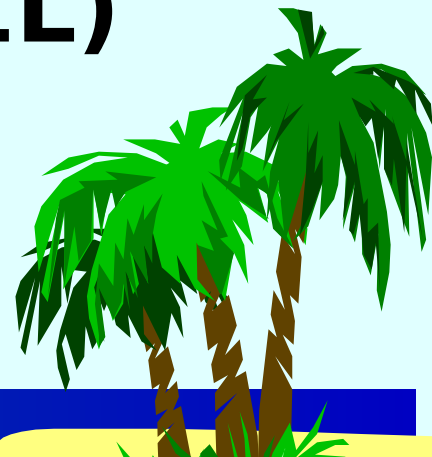
- **AREA OF CIRCULATION IN THE TROPICS THAT MAINTAINS ITS IDENTITY FOR 24 HOURS OR MORE**
- **ORGANIZED CONVECTION**





TROPICAL DEPRESSION

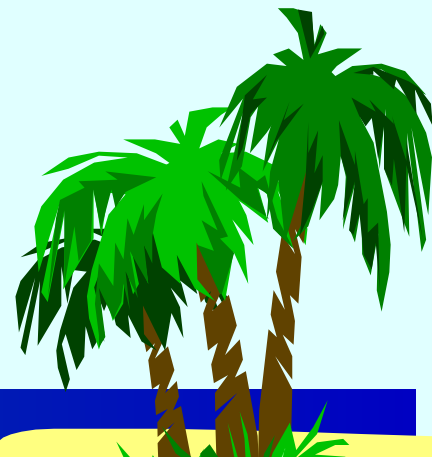
- **ORGANIZED TROPICAL SYSTEM
WITH SUSTAINED WINDS 33 KNOTS
OR LESS
(38 MPH)**
- **CLOSED CIRCULATION**
- **ASSIGNED A NUMBER (I.E., 01L)**





TROPICAL STORM

- **SUSTAINED WINDS OF 34 TO 63 KTS
(39 - 73 MPH)**
- **CIRCULATION BECOMES MORE
APPARENT**
- **ASSIGNED A NAME (I.E., FLOYD)**



HURRICANE

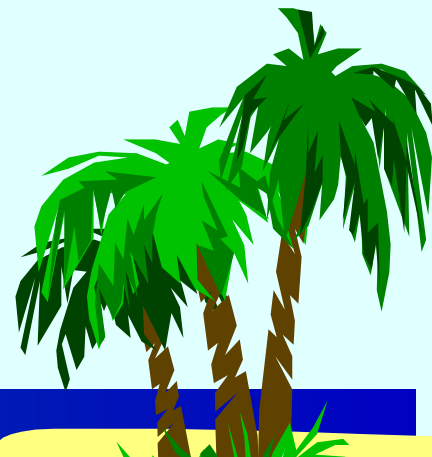


- **SUSTAINED WINDS OF 64 KTS OR GREATER (74 MPH)**
- **WELL-DEFINED**
- **EYE MAY FORM**
- **SUPER HURRICANE - SUSTAINED WINDS OF 130 KNOTS OR GREATER (150 MPH)**





The Five Categories of a Hurricane



Category One



- Sustained Winds **64 - 82 kts (74-95mph)**
- Storm Surge of **4 - 5 ft** above normal
- Coastal flooding and minor pier damage
- Minor damage to shrubs and trees
- Minor damage contained to poorly constructed structures (to include mobile homes)



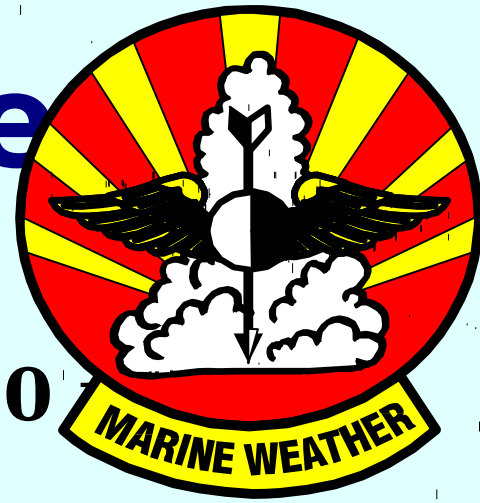
Category Two



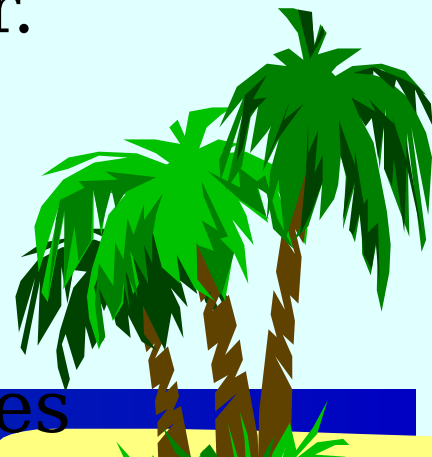
- Sustained Winds **83 - 95 kts (96 - 112 mph)**
- Storm Surge of **6 - 8 ft** above normal
- Coastal and low-lying escape cut by rising water
- **2 - 4 hours** before arrival of Hurricane center
- **Considerable** damage to poorly constructed buildings and signs (to include mobile homes and piers)
- **Considerable** damage to shrubs and trees -



Category Three



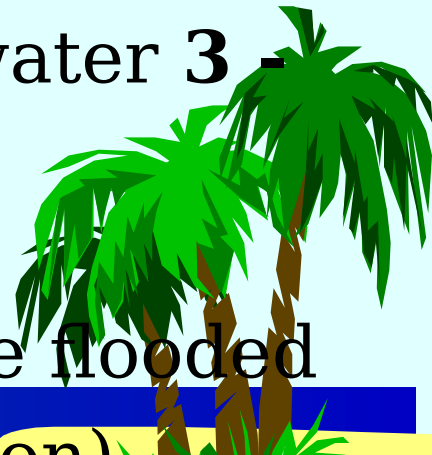
- **Major Hurricane** status
- Sustained Winds **96 - 113 kts (111 - 130)**
- Storm Surge of **9 - 12 ft** above normal
- Minor damage to small residences and utility buildings
- Coastal flooding destroys small structures
- Floating debris damages larger coastal structures
- Low lying escape routes cut by rising water 3 -5 hours before arrival of the Hurricane center.
- Poorly constructed buildings and signs **destroyed**
(to include mobile homes)
- Damage to shrubbery and trees - large trees



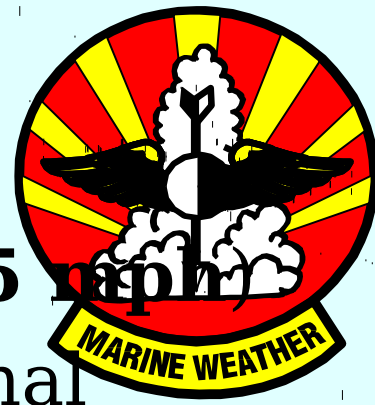
Category Four



- Sustained Winds **114 - 135 kts** (**131 - 153**)
- Storm Surge of **13 - 18 ft** above normal
- Some complete roof failures on small residences
- Shrubs, trees, and all signs are blown down
- Poorly constructed buildings are **destroyed** (to include mobile homes)
- **Extensive** damage to doors and windows
- **Major** damage to lower floors of coastal structures
- Low lying escape routes **cut off** by rising water **3 - 5 hours** before arrival of the center of the Hurricane.
- Terrain lower than **10 ft** above MSL may be flooded inland **6 miles** (requiring massive evacuation)



Category Five



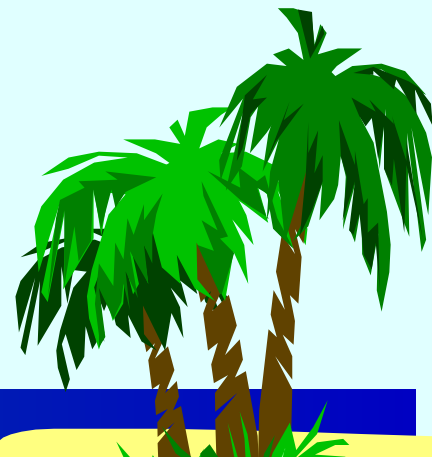
- Sustained Winds **greater than 135 kts (155 mph)**
- Storm Surge **greater than 18 ft** above normal
- **Complete** roof failure on many residences and industrial buildings
- Some complete building failures with small utility buildings blown over or away
- **All** shrubs, trees, and signs blown down
- Poorly constructed buildings completely **destroyed** (to include mobile homes)
- Low lying escape routes **cut off** by rising water **3-5 hours** before arrival of center of the Hurricane
- **Major** damage to lower floors of all structures **less than**

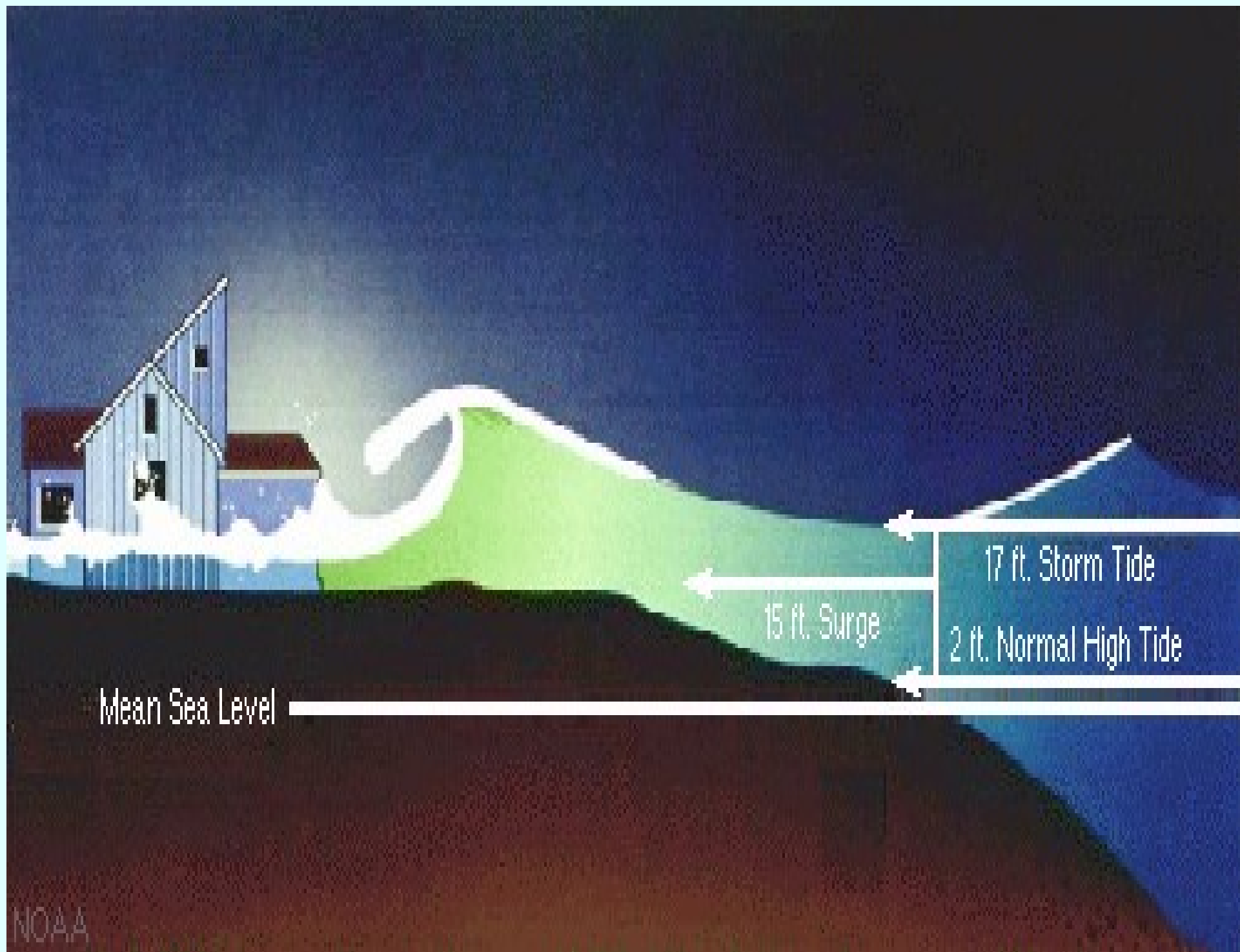




HURRICANE HAZARDS

- **STORM SURGE**
- **HIGH WINDS**
- **DAMAGING SURF**
- **FLOODING**
- **LAND AND MUD SLIDES**
- **TORNADOES**









CONDITIONS OF READINESS

(COR)



- COR V - **ONSET** of Hurricane Season
- COR IV - **POSSIBLE** Destructive Winds
W/I 72 Hrs
- COR III - **POSSIBLE** Destructive Winds
W/I 48 Hrs
- COR II - Destructive Winds
ANTICIPATED W/I 24 Hrs
- COR I - Destructive Winds
ANTICIPATED W/I 12 Hrs



CONDITIONS OF READINESS (COR) Cont.



- COR I (Caution) - Destructive Winds **ARE FORECAST** to affect the Cherry Point Area W/I 6 Hrs
- COR I (Emergency) - Destructive Winds **ARE OCCURRING** in the Cherry Point Area
- COR I (Recovery) - Destructive Weather System **HAS PASSED**, Safety and Storm Hazards Remain



NWS WARNINGS



- **HURRICANE WATCH** - POSSIBLE THREAT TO SPECIFIED COASTAL AREA W/I 36 HOURS
- **HURRICANE WARNING** - HURRICANE FORCE WINDS EXPECTED IN A SPECIFIED AREA W/I 24 HOURS OR LESS
- **FLASH FLOOD WATCH** - FLASH FLOOD IS POSSIBLE
- **FLASH FLOOD WARNING** - FLASH FLOOD IS IMMINENT OR OCCURRING





REFERENCES

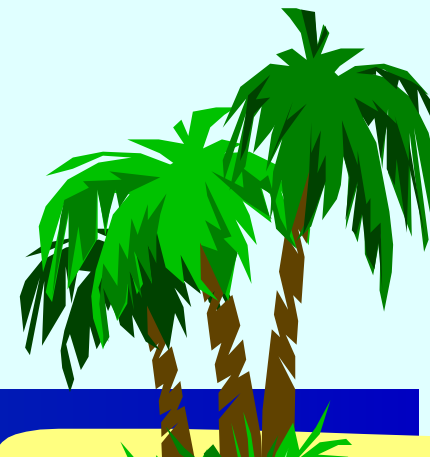
- **OPNAVINST 3140.24E (Warnings and COR Concerning Hazardous or Destructive Weather Phenomena)**
 - **ESTABLISHES COR FOR NAVY AND USMC**
 - **PROVIDES INFORMATION CONCERNING DESTRUCTIVE WEATHER**
- **AirStaO 3140.2L (Destructive Weather Manual)**
- **WgO 3140.1 (2nd MAW Aircraft Evac)**



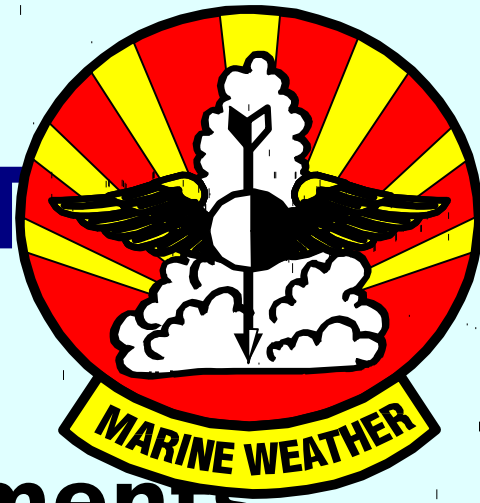


RESPONSIBILITIES

- **NATIONAL HURRICANE CENTER (NHC) / TROPICAL PREDICTION CENTER (PDC)**
 - **Issues Tropical Cyclone Forecasts/Advisories every 6 Hours (0300, 0900, 1500, 2100 Zulu)**
 - **Issues Tropical Cyclone Discussions**
 - **Issues Tropical Cyclone Public Advisories**



RESPONSIBILITIES CONT



■ **LOCAL NWS OFFICE**

- **Issues Hurricane Local Statements (HLS)**
 - **Identifies areas, storm info, impacts and precautionary/preparedness actions**
- **Issues Special Weather Statements (SPS)**
- **Issues Tornado, Severe Thunderstorm and Flash Flood Warnings**

■ **NAVAL ATLANTIC METOC CENTER (NAVLANTMETOCCEN) NORFOLK,**



RESPONSIBILITIES CONT



■ CG, MCAS CHERRY POINT

- Evaluates, sets and coordinates conditions of readiness (COR) for MCAS Cherry Point Area
- Authority exercised through the EOC

■ MCAS WXO

- Advises CG, MCAS, DIROPS and MCAS Destructive Weather Officer
- Recommends Storm COR to CG



RESPONSIBILITIES CONT.



■ JOINT DESTRUCTIVE WEATHER COORDINATION STAFF

- Dir Ops is OIC
- Assembles upon setting COR IV

■ EMERGENCY OPERATIONS CENTER (EOC)

- Activated by CG, MCAS upon setting COR III
- Dir Ops is OIC
- EOC staff comprised of MCAS and 2d MAW reps
- Located in Bldg. #299 (adjacent to CG Bldg 198)
- Coordinates all requests for support



CONTINGENCY PLANS



■ COR IV (72 HOURS)

- Review destructive weather plans
- Inspect area and buildings
- Prepare to issue foul weather gear, generators, potable water
- Submit list of Aircraft Bureau numbers to
2D MAW and Facilities



CONTINGENCY PLANS



■ COR III (48 HOURS)

- EOC activated
- Prepare to set-up emergency shelters
- Complete emergency repair to buildings
- Report MRE requirements to supply
- Coordinate Set-up and Op Check of Comm Equipment
- Issue Foul Weather Gear
- Review Plans
- Personnel and equipment on stand-by
- Report attainment of COR III to EOC





CONTINGENCY PLANS

■ COR II (24 HOURS)

- Remove signs, debris and portable equipment
- Establish Damage Control Party at Cherry Tree House
- Detailed Inspection of all areas
- Tie down and cover remaining equipment
- Position and check emergency generators
- Prepare hangars for maximum hangering of aircraft and equipment
- Secure all field training



CONTINGENCY PLANS



- **COR I (12 HOURS)**
 - **Secure non-essential personnel to quarters**
 - **Continue to provide meals at chow hall**
 - **Complete general security measures**
 - **Closure of activities, facilities and services**
 - **Gate traffic may be limited (Slocum)**
 - **Report attainment of COR I to EOC**

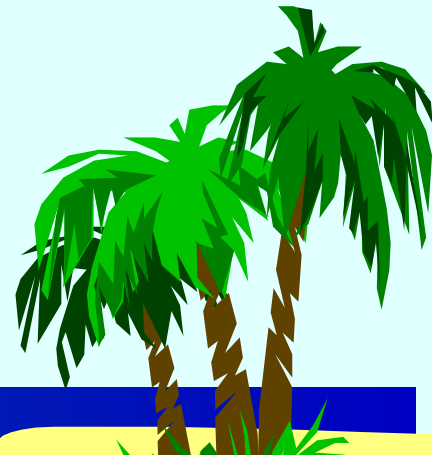


CONTINGENCY PLANS



■ COR I CAUTION (6 HOURS)

- Close Air Station to all incoming traffic except essential personnel
- Secure liberty
- Restrict non-essential personnel to barracks, quarters and shelters
- Maintain essential communications



CONTINGENCY PLANS



- **COR I EMERGENCY (OCCURRING)**
 - **Secure all but essential operations**
 - **Cease vehicular traffic**
 - **Emergency and tactical vehicle ops coordinated by EOC**



CONTINGENCY PLANS



■ COR I RECOVERY

(System has passed, HAZARDS
REMAIN)

- Support EOC in recovery efforts
- Conduct casualty and damage assessments
- Provide reports as required
- Continue to restrict non-essential personnel



EMERGENCY SHELTERS



■ MCAS CHERRY POINT

- **CHERRY TREE HOUSE** (Hancock Housing, Fort Macon, Staff Capehart, Officer Housing, Trailer Park)
- **MARINE DOME** (Over Flow for Cherry Tree House)

■ HAVELOCK

- **HAVELOCK SENIOR HIGH SCHOOL**
(Civilian community emergency shelter)
- **AUTHUR EDWARDS ELEM SCHOOL**
(Slocum Village, civilians)
- **HAVELOCK MIDDLE SCHOOL** (Civilian)



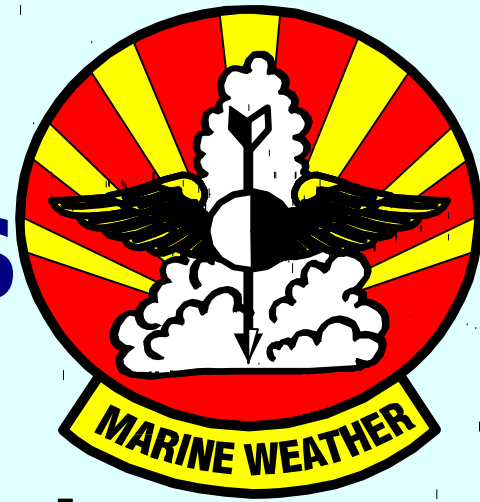


PREPARATION CHECKLIST

- **NOTIFY AND ASSIST FAMILY, FRIENDS AND NEIGHBORS**
- **ARRANGE FOR TRANSPORTATION**
 - Car (fill with gas)
 - Ride with neighbors
- **BRIEF FAMILY ON EMERGENCY PLAN**
 - Destination
 - EVAC Routes
 - Rendezvous Point, If Separated



PREPARATION CHECKLIST



■ ASSEMBLE VALUABLES

- Important papers, jewelry, etc.
- Store on secure shelves or upper floors
- Determine care of pets (Not allowed in shelters)

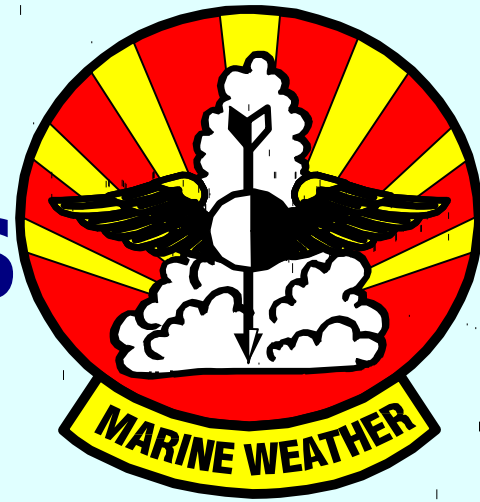
■ SECURE AND STORE LOOSE ITEMS

- Outside and inside

■ LOCATE UTILITY SHUT-OFFS

- Electric/gas





PREPARATION CHECKLIST

- **STORE DRINKING WATER**
 - Containers, Bathtub, Washing Machine
- **BOARD UP OR TAPE WINDOWS**
- **MOOR SMALL BOATS OR MOVE TO SAFE AREA**
- **USE TELEPHONE ONLY FOR EMERGENCIES**
- **MONITOR RADIO AND TV FOR INSTRUCTIONS**





SURVIVAL KIT

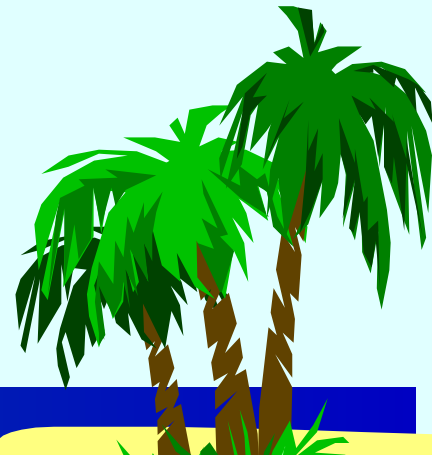
- **PORTABLE RADIO**
- **FLASHLIGHTS**
- **EXTRA BATTERIES**
- **FIRST AID KIT**
- **NON-PERISHABLE FOOD (5 DAYS)**
- **NON-ELECTRIC CAN OPENER**
- **CONTAINERS OF WATER**
- **SLEEPING BAGS / BLANKETS /
AIR MATTRESSES**



SURVIVAL KIT



- **SPECIAL MEDICATIONS / DIETS**
- **CHANGE OF CLOTHES**
- **PERSONAL HYGIENE / SANITARY SUPPLIES**
- **TOILET ARTICLES / DIAPERS**



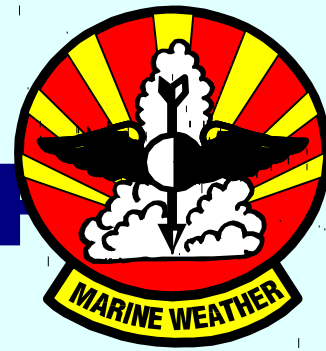
PRIORITIES OF DISASTER PREPAREDNESS



- **PRIORITY I - PROTECT AND SAVE LIVES**
- **PRIORITY II - PROTECT AND SAVE PROPERTY**
- **PRIORITY III - RESTORE PROPERTY**



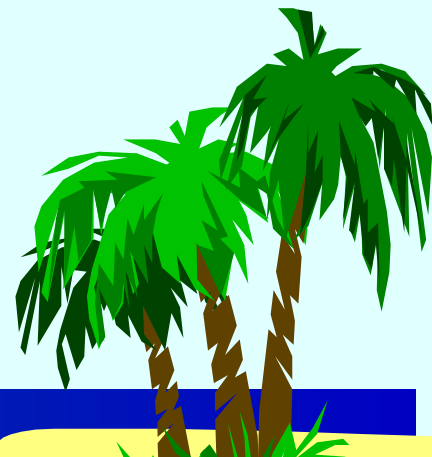
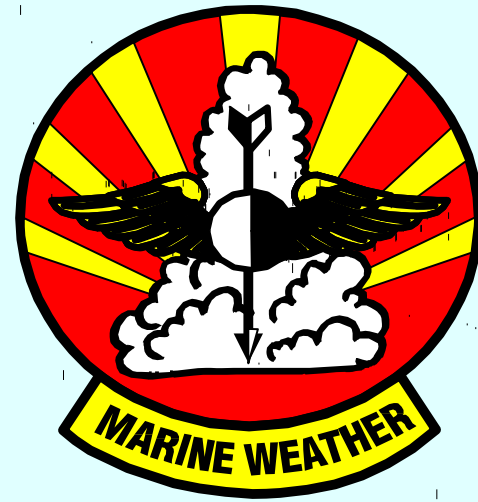
IMPORTANT PHONE NUMBERS

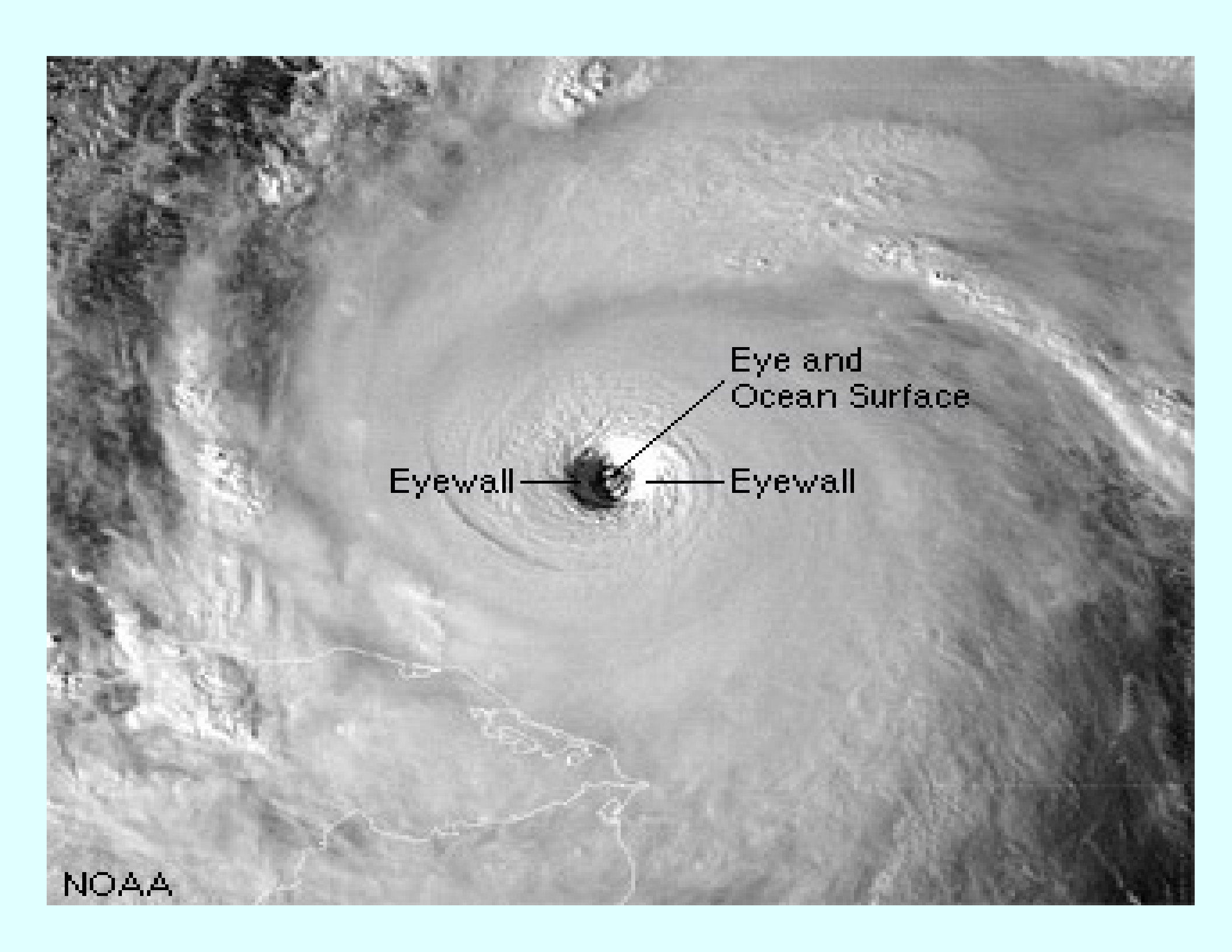


- **MCAS MPs: 466-3615/3616**
- **MCAS FIRE DEPT: 466-3337**
- **EMERGENCY POLICE, FIRE, AMBULANCE: 911**
- **MCAS CDO: 466-5236**
- **MCAS WEATHER: 466-2523**
- **NAVAL HOSPITAL: 466-0266**
- **HAVELOCK PUBLIC SAFETY: 447-1111**
- **MCAS CHANNEL 6**
- **CRAVEN DISASTER PREPAREDNESS: 636-4271**



SUPPORTING DOCUMENTS

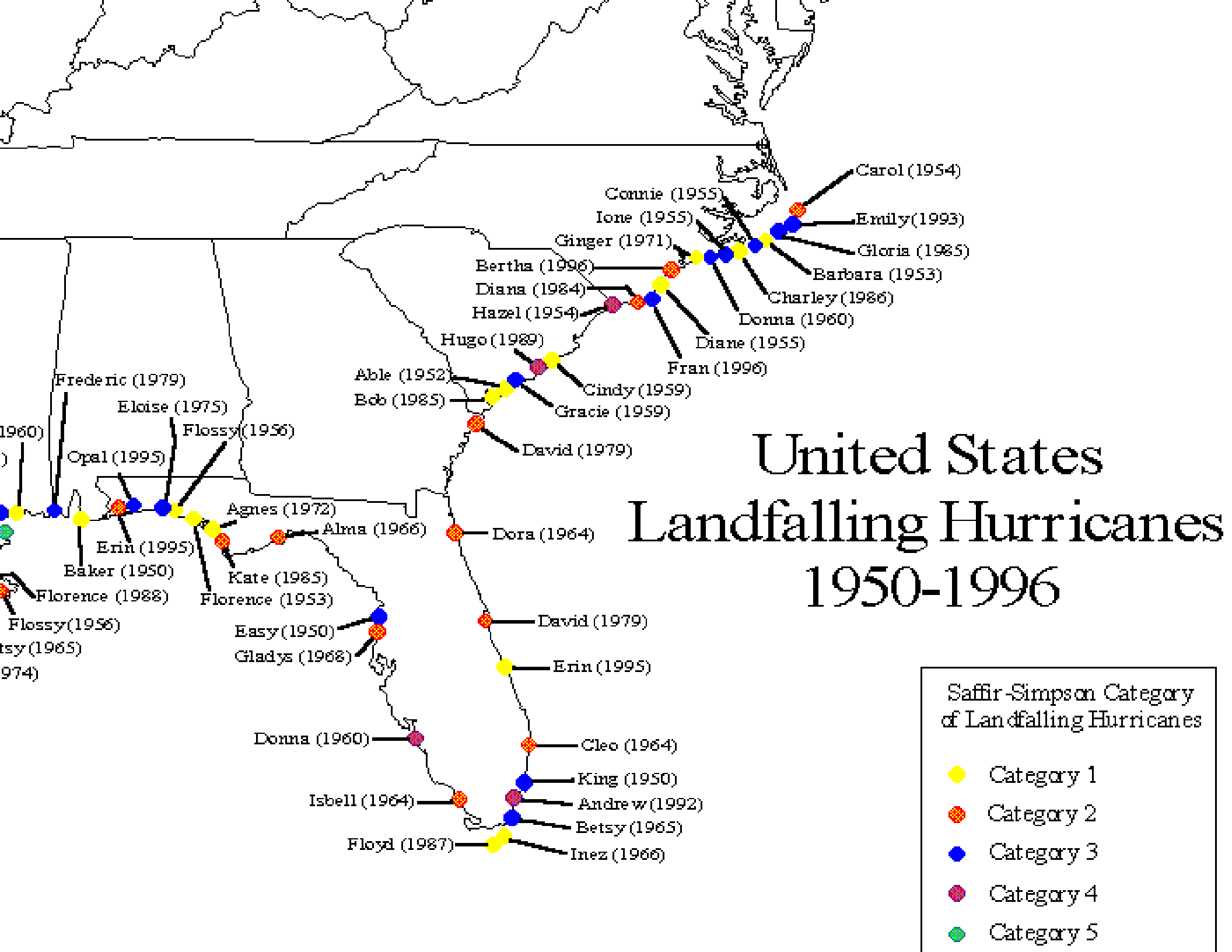


An aerial photograph of a hurricane, showing the central eye and the surrounding eyewall. The eye is a bright, circular area in the center, and the eyewall is a darker, ring-like structure surrounding it. The surrounding clouds are dark and swirling. Labels with leader lines point to the eye and the eyewall.

Eye and
Ocean Surface

Eyewall

Eyewall



120° 115° 110° 105° 100° 95° 90° 85° 80° 75° 70° 65° 60° 55° 50° 45° 40° 35° 30° 25° 20° 15° 10° 5° West 0° East 5°

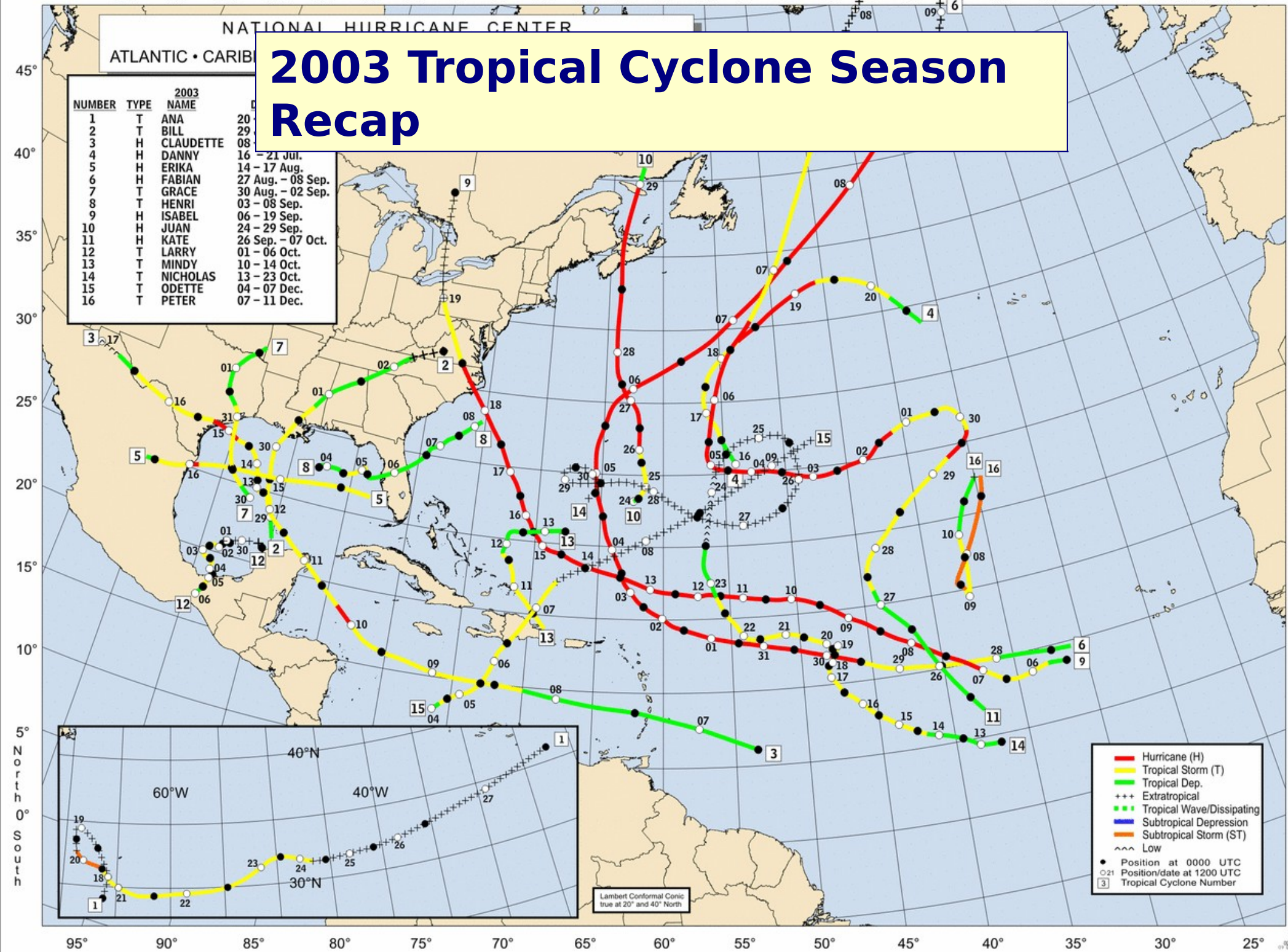
NATIONAL HURRICANE CENTER

ATLANTIC • CARIB

2003 Tropical Cyclone Season Recap

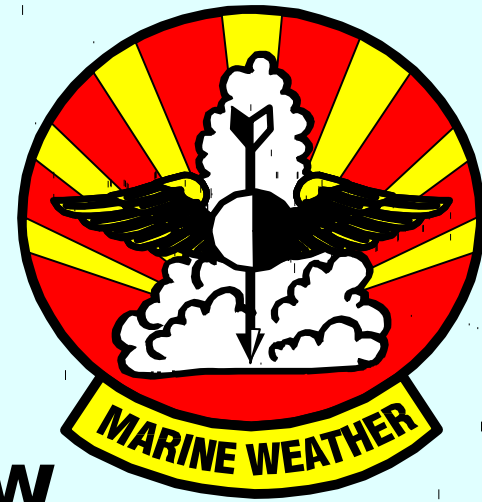
NUMBER	TYPE	2003 NAME
1	T	ANA
2	T	BILL
3	H	CLAUDETTE
4	H	DANNY
5	H	ERIKA
6	H	FABIAN
7	T	GRACE
8	T	HENRI
9	H	ISABEL
10	H	JUAN
11	H	KATE
12	T	LARRY
13	T	MINDY
14	T	NICHOLAS
15	T	ODETTE
16	T	PETER

16 - 21 Jul.
14 - 17 Aug.
27 Aug. - 08 Sep.
30 Aug. - 02 Sep.
03 - 08 Sep.
06 - 19 Sep.
24 - 29 Sep.
26 Sep. - 07 Oct.
01 - 06 Oct.
10 - 14 Oct.
13 - 23 Oct.
04 - 07 Dec.
07 - 11 Dec.



Lambert Conformal Conic
true at 20° and 40° North

Year 2004 Storm Names



**Alex
Bonnie
Charley
Danielle
Earl
Frances
Gaston
Hermine
Ivan
Jeanne
Karl**

**Lisa
Matthew
Nicole
Otto
Paula
Richard
Shary
Tomas
Virginie
Walter**

